Group Three Outbrief

Team Members

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• Jim Pekny	Raytheon
• Al Sanders	Honeywell
• Charles Stirk	Cost Vision
• David Thompson	New Vectors

Overarching Pro & Cons

- Pros:
  - MRLs and MRAs are obviously filling a need in S&T/ Acquisition.
  - Process incorporates early assessment.
  - Criteria can be tailored to system / program.
  - Cost of performing MRAs was not considered to be significant.
    - If program is prepared well.
  - Industry moving ahead quickly.
- Cons:
  - MRL levels 1 & 2 are difficult to differentiate and add little value.
  - Matrix has criteria descriptions for 1&2 that are not available (or sometime possible) at the early stages.
  - There is no “One-size-fits all” process.
  - Independent Review Process is not explained well.

Definitions and Matrix

- Levels 1-3:
  - Levels 1&2 are not as valuable as written.
  - Matrix has criteria descriptions for 1&2 that are not available (or sometime possible) at the early stages.
  - Design and Technology most useful threads, but also should mark cells with “NA” if there are no criteria.
- However: Consensus opinion that implementation of MRLs EARLY in development is critical to influencing cost/ schedule/ performance.
  - MRAs around MS A are critical to properly defining the TDS with baseline maturity and identify key risk areas.
  - MRA’s at MS B have limited influence, because baseline design is already set.
  - Conventional practice of assessing manufacturing at MS C is way too late to affect change.
- Some threads may need additional elements (i.e. design, production test, etc.)
- Proactive activities such as obsolescence management need to be moved up.

Deskbook Topics

- More Examples needed to illustrate the points in the Deskbook.
  - Scoping critical elements
  - Determining proper supplier level
  - Required results (Charts, report, level if detail)
- Reporting requirements:
  - Agreement that individual elements should not be ‘Hidden” in any roll-ups. (use system breakdown structure)
  - Recommend standard format, tailored to individual system applications.
  - Might not be effective to use R/Y/G, instead use bar chart format in comparison to desired level.
- SOO/SOW language seemed to be fine.
  - Recommend adding existing AF SBIR language to chapter 6. (To be provided)
- Support for Award Fee incentives
  - Effective method to drive behavior, manufacturing engineers will finally get attention from PM!
  - Has been used before on FCS.

MRA Process

- Need an initial MRA at or directly following MS A, with results to influence TDS.
- The real objective of an MRA is the knowledge gained: identification of the gaps and the action plans to address them.
  - The process should not focus on scores alone.
- Acquisition Perspective: Senior Leadership is key.
- The cost of conducting MRAs were not considered to be significant.
  - Particularly by including the MRL tasks in the program plan initially. Identifying the required artifacts (technical data) early reduces costs by preparing the program to collect data most effectively.
  - Best practices:
    - properly scoping the system elements with PMO and MRA team
    - preliminary self-assessment
- MRAs are not a one-time event
  - Key success factor will be the requirement to perform an initial assessment near MS A to capture baseline and construct a plan to get MRLs to level 6 at MS B.
  - Will need MRAs prior to MS B, MS C, and FRD.
- True success comes from funding the plans which result from the MRAs
  - MRAs identify risks or gaps in the current funding plans, leading to additional upfront investment to rectify at their source, thereby eliminating backend cost overruns.

Policy

- Agreement with standard target of MRL 6 at MS B, MRL 8 at MS C
- Recommend that DDR&E be responsible for reporting MRLs at DAB Milestone Reviews, and coordinating with PDR, CDR, and PRR activities as appropriate.
- The MRA process should be aligned with the TRA process, with equal weight and priority.
- Recommend that Manufacturing Maturity Plans (funded) be briefly mentioned in policy, but leave details to deskbook /DAG.
- Policy should apply to SBIR topics which are sponsored by acquisition programs.
- Policy should refer to training and inclusion within DAU courses.